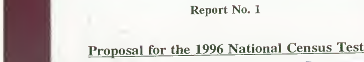
Census Recensement





Report No. 1

Proposal for the 1996 National Census Test

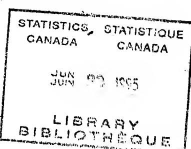
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Report No. 1

Proposal for the 1996 National Census Test



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Proposal for the 1996 National Census Test

A. Introduction

This document describes the objectives, sampling methodology, strategy, resource requirements and schedule for the November 8, 1993 National Census Test of the 1996 Census 2B questionnaire. This test is the major component of the testing strategy designed for the Census of 1996. The National Census Test content reflects the requests made to the Content Determination Project during the 1992/93 round of 1996 Census content consultations. All new questions were submitted to focus group testing held prior to this National Census Test.

B. Test Rationale

The 1996 Census Content Determination Project specified that all new content questions were to be tested prior to the 1996 Census. The November National Census Test provides the sole questionnaire testing opportunity available to the 1996 Census Content Determination Project. This test features all new 1996 Census content, as well as additional questions required for data analysis purposes.

As well, there is doubt as to the usefulness of the Guide to the 2B form. Review of 1991 collection experiences, in particular of questions to the Telephone Assistance Service (T.A.S.), suggests that many respondents did not use the Guide or found it confusing. It is proposed therefore that the National Census Test include questions on the perceived usefulness of the Guide.

The sample size, as noted in Section D of this document, is sufficient to detect major response errors. The quality of question response would be evaluated by subject matter experts as specified in their data analysis plans.

While 1996 Census content changes are expected to be limited, there appears to be sufficient question change to warrant testing of all census content areas. It is for this reason that the National Census Test includes a nationally representative sample, rather than a modular test which would have a more limited scope and capability.

Based on content consultations to date, 1991 Census data evaluations and focus group work done in the 1992/93 fiscal year, the 1996 National Census Test tests changes to the following content and coverage areas:

Steps 1-8 (coverage changes), but not Step 7, Agriculture
Relationship to person 1

Official and non-official language knowledge
Ethnic ancestry and race
Identification of aboriginal respondents
Household and volunteer activities
Language of education and work
Place of work
Type of industry
Mode of transportation to work
Place of residence one and five years ago.

All areas identified for change are noted in Table 1 (see Appendix 1).

It should be noted that the test is not to be a test of data capture or processing methods.

In the area of edits, mandatory follow-up has been replaced with a "Rule of 6".

C. Test Objectives

The main objectives of the 1996 National Census Test are:

i. To test the 2B questionnaire containing potential proposed 1996 Census content using collection methods as close as possible to those expected to be used in 1996.

ii. To evaluate respondents' understanding of the wording and the key concepts of each item on the questionnaire, and in particular:

a) the validity of response;
b) difficulties associated with the response;
c) any problems with the order of the questions;
d) any problems associated with the language of the questionnaire (English/French).

iii. To evaluate respondent reactions to the questionnaire whenever possible, and, in particular, to identify new sensitive items on the questionnaire and areas of response burden.

iv. To evaluate any parameters that might be useful for the design and management of 1996 field operations, for example rates of failure to the field edits used in the Test and response rates.

v. To assess the usefulness of the Census Guide, which is to be rewritten using a simplified language and a more accessible format.

vi. "Rule of 6": follow-up takes place only if 6 questions or more or any steps are not answered.

D. Study Design

1. Advanced Labour Force Survey Sample

i. Sample Design

The sample for the November 8, 1993 National Census Test consists of a sample of dwellings "rotated-out" (i.e. finished with) from the Labour Force Survey (LFS) in September, October and November 1991, equivalent to three one-half rotation groups. It is felt that the effect on householders of being in the LFS will have faded enough after two years that no bias is likely to occur in test results. Besides, some number of the dwellings will have new residents who would have never participated in the LFS.

This approach allows the use of the LFS sampling and estimation infrastructures which considerably reduces the costs of the test and, at the same time, insures a good level of data quality. However, one should note that the household coverage of the LFS is different from the target population of the Census. Consequently, the National Census Test coverage will not include populations living on Indian Reserves, in Yukon, Northwest Territories, remote areas of some provinces, on military bases and in institutions.

The estimated 17,100 dwellings in these LFS rotation-groups should include approximately 14,700 occupied private households. If a final response rate of 80% for the test and an average number of persons in private households by province equal to the 1991 Census counts is answered (Dwellings and Households, The Nation, Catalogue 93-311), Table 1 below provides an approximate sample size of respondent households and persons by province and regional grouping.

This sample should produce very reliable estimates at the national level, and good quality estimates at the provincial level (at least for the larger provinces). However, cross tabulations would obviously be limited in magnitude as well as estimates for rare populations, particularly at the provincial level. In order to provide a quantitative indication of the reliability that might be expected for estimates derived from the National Census Test sample, an "average" coefficient of variation for the estimate of the total number of persons with a characteristic of interest is estimated. Its calculation assumes a LFS design effect of 2 which is reasonable for most of the Census variables. One should note however that this would lead to an overestimation of the reliability for some variables such as some language and ethnic groups. The clustering of the population according to these variables tends to increase the sampling variability of the estimate under the sample design of the LFS.

Table 1: **Approximate sample size of respondent households and persons by province and region**

Province	Number of Responding Households	Number of persons
Nfld.	546	1747
P. E. I.	286	801
N. S.	798	2155
N. B.	710	1988
Atlantic	2340	6691
Qué.	2219	5769
Ont.	3373	9107
Man.	786	2044
Sask.	893	2411
Alta.	1078	2911
Prairies	2757	7366
B. C.	1051	2733
TOTAL	11,740	31,666

We have considered a coefficient of variation of 16.5% which is used by the LFS as a cut-off to qualify estimates. Published estimates with a coefficient of variation greater than 16.5% must have cautionary notes associated with them, informing the reader of the high sampling variance associated with the estimate. The following table gives, for every province and for regional groupings, the proportion and the total number of persons with a characteristic of interest corresponding to a coefficient of variation of 16.5%.

Table 2. Minimum percentage and minimum total of respondents with a characteristic of interest corresponding to a coefficient of 16.8%, by province and region

Province	Minimum percent of population	Minimum total
Nfld.	4.7	26,239
P. E. I.	8.6	10,818
N. S.	3.3	28,710
N. B.	3.6	25,857
Atlantic	1.1	25,836
Qué.	1.2	80,763
Ont.	0.8	78,261
Man.	3.3	35,086
Sask.	2.9	28,183
Alta.	2.4	60,492
Prairies	1.0	43,564
B. C.	2.5	80,189
TOTAL	0.2	60,878

For example, in Ontario, where the sample size is the largest, if the estimate for a characteristic of interest is higher than 78,261 (or represents more than 0.8% of the population), the coefficient of variation of the estimate would be lower than 16.5%. Conversely, if the estimate is under 78,261 the coefficient of variation would be higher than 16.5%. In Prince Edward Island, where the sample size is the lowest, if the estimate for a characteristic of interest is higher than 10,818 (or represents more than 8.6% of the population), the coefficient of variation of the estimate would be lower than 16.5%, and vice versa.

Confidence intervals are another way of considering the reliability of estimates and can also be estimated from the table. A 95% confidence interval for an estimate is given approximately by

[estimate ± 2 x estimate x CV]

For example, a 95% confidence interval for an estimate of 78,261 in Ontario would be [52,435, 104,087] and [0.5% , 1.1%] for the corresponding percentage of 0.8%. Generally, the confidence interval would be wider for a lower estimate and narrower for a higher estimate. In PEI, a 95% confidence interval for an estimate of 10,818 would be [7,248, 14,388] and [5.8% , 11.4%] for the corresponding percentage of 8.6%.

ii. Edit Failure Study

An Edit Failure Study consists of an analysis of the questionnaires received in the Regional Offices before any follow-up to correct for field-edit failures. This study permits estimation of initial response rates and provides a direct measure of difficulties encountered during self-completion. Also, a comparison with field-edit results allows a basis for explaining item non-response and response errors. For field operations planning, the Edit Failure Study yields an estimate of the percentage of questionnaires that would require a follow-up during normal field operations, thus collection costs for 1996 can be estimated.

The November 1993 National Census Test (NCT) Edit Failure Study requires the data capture of questionnaires prior to field edits. There will be two data capture operations in the Regional Offices: one for a sample of the questionnaires received by mail, before field edits; and one for all questionnaires after follow-up for non-response or field-edit failures. The questionnaires captured before field edits would then be returned to interviewers for field edit and any follow-up required because of edit failures.

For the NCT Edit Failure Study, a sub-sample of one-half of all dwellings will be selected. The sample will be further limited by including only questionnaires mailed back directly to Regional Offices, with no interviewer intervention. Based on 1991 results, we expect about 50% of forms will be mailed in. As a result, the Edit Sample Study should have a sample of about 3,700 households.

2. Special Population Samples.

The LFS sample is aimed at representing Canada's population (excluding those residing in areas or institutions not sampled by the LFS). However, the National Census Test LFS based sample will not include a sufficient number of respondents belonging to special populations, such as Aboriginal peoples living off reserve, recent immigrants, and ethnic, linguistic and visible minorities.

Supplementary samples containing high concentration of persons belonging to these special populations will be included in the National Census Test. Most of these samples will come from the Visitation Records (VR) of the 1991 Census corresponding to enumeration areas with concentrations of target populations. It is likely that the neighbourhood characteristics would remain relatively stable in spite of the 2½ years between the completion of the VR

and the National Census Test field operations. These supplementary surveys would not provide random samples of the special populations or comparable estimates with other surveys. They should however provide a reasonable assessment of the census questionnaire and the identification of problems particular to these populations.

The twelve special population samples proposed are:

- Blacks in Halifax (e.g. Canadian, African);
- Blacks in Montréal (e.g. Haitian, African);
- Blacks in Toronto (e.g. Canadian, Caribbean, African, Guyanese);
- Asians in Montréal (e.g., Vietnamese, Chinese);
- Latin Americans in Montréal;
- Asians in Toronto and Vancouver (e.g. Chinese);
- Aboriginals in Winnipeg, Regina and Edmonton;
- Métis in Winnipeg and Saskatoon.

A sample of around 200 responding households per target population should be enough for the purposes of the study. With the exception of the Métis samples, the sample has been systematically taken from contiguous EAs with a high concentration of people who belong to the population considered. The sample should be spread out into several EAs to avoid concentration of the sample in a neighbourhood that might be particularly difficult to interview. To compensate for non-response and vacant households, the sample size should be inflated to about 300 households, thereby obtaining a good balance between the number of follow-ups required and the final sample size. The Métis dwellings in Winnipeg and Saskatoon will be chosen from membership lists of provincial Métis Associations. The total size proposed for the special population sample is expected to be about 4000.

E. Analytical Methods

In order to achieve the objectives of the National Census Test, it is suggested that the following methods would be used to analyze the results.

1. <u>Respondent understanding</u>

i. Comparison of the National Census Test estimates with those from other comparable sources (e.g. LFS, 1991 Census, General Social Survey);

ii. Cross tabulations of related questions to evaluate the consistency of the responses;

iii. Analysis of the final response rates as well as initial rates through a special study similar to the Edit Sample Study;

iv. Analysis of debriefing questionnaires and debriefing sessions with interviewers related to field-edit failures and follow-up interviews;

v. Separate analysis of the special population samples.

vi. Analysis of control forms.

2. Respondent reaction

i. The National Census Test questionnaire includes questions related to respondent impressions of the questionnaire content, wording and layout. These questions could also include such topics as the need to use the questionnaire guide and evaluation of it's usefulness, difficulties in answering or negative reactions to particular questions, reasons for item non-response, questions about whom to include, and comments on field operations;

ii. Interviewer debriefing on respondent reactions during telephone and personal interviews and follow-up for field-edit failures;

iii. Analysis of the Census Help Line report (for example, the number of calls, dates and times, durations and topics).

3. Measuring field operations parameters

i. The study would consist of ensuring that proper measurements of collection resource use are made in the field. These would be summarized for the Survey Operation Division (SOD) needs. The main source of information would be the proposed Edit Failure Study;

ii. We will also include in interviewers' tasks a report on collection activities for each household in the assignment. This report will include such information as frequency of contact at drop-off, incidence of provision of telephone numbers for follow-up, reasons for refusal, whether the questionnaire was returned by mail or not, etc. These reports would be captured and analyzed for SOD planning needs.

F. Data Collection and Processing Methodology

1. For cost and timing reasons, only one version of the questionnaire will be tested. This means that one standardised set of questions will be developed for the content. Response will be mandatory.

2. Questionnaires for LFS and special samples would be dropped off by interviewers, with a return envelope for mail-back to ROs by a deadline date. Contact would be attempted with a household member at drop-off, to determine the official-language preference, explain the test, and to obtain a telephone number for follow-up if needed. In case of non-contact, interviewers would leave questionnaires in both English and French. There would be no advance letter to the household; instead, an introductory letter from the Chief Statistician, explaining the test objectives, would appear on the front page of the questionnaire. It is critical that self-enumeration be encouraged in the test, thereby simulating as closely as possible the questionnaire completion conditions of a Census. Interviewers would make follow-ups to non-response and failed-edit households, first by telephone and then in person. Up to three visits would be attempted.

3. A Census Help Line (CHL) (renamed from 1991's Telephone Assistance Service, T.A.S.) will be set up in Ottawa for the dates November 1 to November 12, 1993.

4. Regional Offices are asked, as much as possible, to seek interviewers with survey experience. We estimate that about 300 interviewers would be enough for the Test. It is advisable that interviewers working with the Special Population Sample have either the experience, language skills or cultural sensitivity.

5. Returned questionnaires would be logged-in and returned to interviewers for field edits. For the Edit Failure survey, data would be captured from a sample of returned questionnaires before any edits would be conducted. Resources consumed would be used to estimate resources needed in 1996. Minimum field edits would be carried out, and they would be based on expected 1996 edits. Questionnaires failing the edits would be followed up by interviewers. Records would be kept of non-response rates and edit failures, for analytical comparison with 1991 rates. Since there would be no re-interview component to the National Census Test, it is crucial for the aim of the Test that the field edits detect the kind of response or response errors or inconsistencies. Any information related to reasons for non-response or response error, collected by interviewers during follow-up interviews, should be properly registered for further analysis. Debriefing of interviewers will permit subject matter analysts to further analyze response problems.

6. Completed questionnaires would be groomed, then captured in the Regional Offices using the DC-2 capture system, and then transmitted to Head Office for further processing.

7. Selected write-in responses will be captured and auto-coded. The write-ins planned for capture and auto-coding are:

languages spoken
language of education
knowledge of languages
language of work

mother tongue
ethnic ancestry
race
place of birth
Band/First Nation
citizenship
residence 5 years ago
place of work
Aboriginal or Indian band.

Relationship to Person I, occupation and industry questions will be captured but not auto-coded.

8. Data would be subject to a custom-written edit program, to be developed with subject-matter experts, that would provide counts of numbers of records with and without each error condition. The file would not be subject to edit and imputation, in that there would be no attempt to impute missing values apart from age and sex, which are needed for weighting. For all other cases, non-response codes would be inserted. Output files would be person-records, with household and dwelling data on each record for members of a household. Household weights would be developed and added to each record. A limited number of derived variables would be created to facilitate analysis.

G. Limitations of the National Census Test.

Because of restrictions already mentioned, the National Census Test would have some limitations as a device for testing the questionnaire content of the 1996 Census.

1. The sample size of the test would allow precise comparisons at the national level and to some extent at the provincial level, at least for the larger provinces. Consequently, errors or inconsistencies for small geographical area estimates or rare-event estimates would likely not be detected by the proposed study. However, beyond a certain level, any increment in precision related to sample size augmentation is very small. Consequently, the requirement for small level comparisons is probably incompatible with the scope of a content test, at least under the restrictions imposed on the content test of the 1996 Census.

2. Since there would be no public communications activities in support of the test, it is expected to be more difficult to provide respondents with general awareness of the test, the reasons why they should complete the forms and to remind them to send them back in the days immediately following the Test Census Day. In addition, public communications contributes to general awareness of the Census Help Line (CHL) and encourages people to use this service. Finally, the absence of public communications, means that activities which assist special groups would not be in place and might reduce their participation.

However, these constraints occur with any pre-Census test. It is not possible to re-create the media and public awareness that is generated during the Census enumeration period.

While a significant media awareness campaign is not planned, Regional Offices will be resourced to undertake a directed and selected public awareness exercise. Depending on the needs of the Regional Office, this could include the display of posters in languages other than English or French, notification of municipalities and Chiefs of Police of the test or placement of articles in ethnic or community-based newspapers.

3. Even if all efforts are undertaken to simulate the conditions under which the Census is carried out, this goal cannot be fully achieved. As a result, all conclusions from the National Census Test would need to be qualified as to the degree to which they might be applicable to the 1996 Census.

4. Cross-tabulation analysis of respondent answers would be one of the main devices for identification of response errors and inconsistencies. However, since it is planned to test what is likely to be the 1996 Census questionnaire, the space available for additional questions for analysis purposes would be very limited and only selected topics would be considered under this approach.

5. Because of cost and time constraints, there will be no opportunity to test more than one version of a question. Response errors in the test would have to be substantial for any decision on further rewording of questions, given that there would be time for only very limited testing after May 1994. The choice therefore would primarily be between the 1991 questions and the 1996 National Census Test versions. Users can be warned in advance of 1996 of the types and possible extent of response error that, from test results, may be associated with certain questions.

6. The target population of the LFS is the general Canadian population; however, the LFS excludes such areas as the Northwest Territories, Yukon, institutions, Indian Reserves and military bases. This implies that special populations such as Aboriginal respondents would constitute a small portion of the sample. This limitation would be compensated partly through the special population samples described in section D 2.

7. There would be no re-interview to evaluate the general validity of the information provided by respondents. However, some understanding of respondent reaction will be obtained through debriefing of interviewers.

8. Because of restrictions imposed on data processing, operations such as editing, coding, imputation and development of derived variables would be far more limited than for the 1991 or 1996 Censuses, but will be comparable with previous census testing.

H. Costing Assumptions

Cost estimates are based on the data collection and sampling methodology described above, based mainly on 1991 experience:

1. 20,740 potential dwellings (main survey plus special samples) to be visited.

2. 18,000 of the dwellings would be found to be occupied.

3. 9,000 questionnaires (from 50% of the households) would be returned by mail.

4. 2,700 (30% of non-mail-returners) would be followed up successfully by telephone; 21 interviewer-minutes per household, including call-back time.

5. 6,300 (70% of non-mail-returners) would receive personal follow-ups, requiring 16 interview-minutes plus 12 minutes travel-time per visit, with an average 2 visits per household; total 40 minutes per household.

6. 6.3 minutes editing-time for the 9,000 mail-response questionnaires.

7. 61% (5500) of the mailed-back questionnaires would fail edits.

A successful telephone follow-up would be made to 72% (4000) of the mailed-back questionnaires that fail edits, taking 6 minutes. The remaining 28% (1500) would receive three telephone calls at 2 minutes each, plus seven personal-interview minutes plus two 12-minute trips, for a total of 37 minutes.

The average interviewer-rate would be $12/hr for an expected 300 interviewers, plus $15/hr for 40 senior interviewers.
Data would be captured and processed through to a raw person-file (mainframe or micro), "edited" to give error-condition counts.

APPENDIX 1.

Outline of Proposed Changes to the 1991 2B Questionnaire

Table 1. **Outline of Proposed Changes to the 1991 2B Questionnaire**

National Census Test (NCT) Questions	Comments
Coverage	Change in location of roster Change in temporary residence question
Relationship to Person 1 (Q.2)	Blended families enumerated "Common-law partner" changed to "unmarried partner".
Sex (Q.4)	Mark-in circles arranged horizontally.
Marital Status (Q.5)	Title changed (to "Marital Status"). Entry "Separated, but still legally married" re-worded.
Common-law Status (Q.6)	Definition included on questionnaire.
Activity Limitations (Q.7)	Repositioned on questionnaire.
Long-term Disabilities (Q.8)	Repositioned on questionnaire.
Knowledge of Languages (Q.9) Language Spoken at Home (Q.10) First Language Learned at Home (Q.11)	Knowledge of official and non-official languages put in one question. No change No change
Place of Birth (Q.12)	Mark-in circles for countries other than Canada removed.
Citizenship (Q.13)	Citizenship other than Canadian is now a write-in entry.
Landed Immigrant Status (Q.14)	Definition added to question.
Year of Immigration (Q.15)	No change
Ancestry (Q.16)	Write-in response "Canadian" included in list of examples. "Haitian", "Jamaican" replace "Black". "East Indian" added. "Cree", "Micmac" replace "North American Indian". "Portuguese" added.
Aboriginal Peoples (Q.17)	New

Table 1. Outline of Proposed Changes to the 1991 2B Questionnaire

National Census Test (NCT) Questions	Comments
Population Group (Q.18)	New
Indian Band/First Nation Membership (Q.19)	Minor change for 1991 – made into separate question.
Registered Indian (Q.20)	Made into separate question.
Place of Residence One Year Ago (Q.21)	Made same as residence five years ago. CSD level of data captured.
Place of Residence Five Years Ago (Q.22)	Minor change in format
School Attendance (Q.23)	Date change only
Language of Education (Q.24)	New
Degrees, Certificates or Diplomas (Q.25)	No change
Household Activities (Q.26)	New
Volunteer Activities (Q.27)	New
Labour Market Activities (Q.28)	Minor wording changes
Absence from Job (Q.29)	No change
New Job Arrangements (Q.30)	No change
Recent Job Search (Q.31)	No change
Availability for Work (Q.32)	Minor wording changes
Last Date of Work (Q.33)	Minor wording changes
Name of Employer (Q.34)	No change
Kind of Business (Q.35)	No change
Industry Category (Q.36)	New
Kind of Work (Q.37)	No change
Most Important Duties (Q.38)	No change
Class of Worker (Q.39)	Minor wording changes
Incorporation Status (Q.40)	No change
Language of Work (Q.41)	New

Table 1. Outline of Proposed Changes to the 1991 2B Questionnaire

National Census Test (NCT) Questions	**Comments**
Place of Work (Q.42)	Diagram added. "No fixed workplace address" added. Instruction reworded.
Transportation to Work (Q.43)	New
Weeks Worked in 1992 (Q.44)	No change
Full-time or Part-time Work (Q.45)	No change
Income in 1992 (Q.46)	Minor format changes
Who Pays (Q.47)	Self-coded
Owned or Rented (Q.48)	No change
Who Completed Questionnaire (Q.49)	Added for later analysis of NCT results.
Step 10	New

Table 2. **Questions Deleted from the National Census Test**

1991 Census question not asked in the National Census Test	Comments
Religion	Asked only in decennial censuses.
Fertility	Asked only in decennial censuses.
Schooling: Highest Grade of Elementary or Secondary	No change for 1996 – needed space for other questions.
Schooling: Years Completed at University	No change for 1996 – needed space for other questions.
Schooling: Years of Other Non-university Education	No change for 1996 – needed space for other questions.
Schooling: Major Field of Study	No change for 1996 – needed space for other questions.
Rooms [number of] Bedrooms [number of]	Asked only in decennial censuses. Required space for additional test questions.
Period of Construction [of dwelling]	No change for 1996 – except updating of the periods. Needed space for other questions.
Condition of Dwelling	Asked only in decennial censuses. Required space for additional test questions.
Annual Payments	No change for 1996 – needed space for other questions.
Rent, Monthly Cash	No change for 1996 – needed space for other questions.
Owner's Major Payments	No change for 1996 – needed space for other questions.

APPENDIX 2.

NCT Schedule

NCT-2023					15/2/94
ID	Name	Duration	Scheduled Start	Scheduled Finish	Predecessors
1	1. CONTENT MATERIAL	52d	20/7/93	1/10/93	
2	Printing of English Questionnaire	13d	4/8/93	20/8/93	
3	Printing of French Questionnaire	14d	4/8/93	23/8/93	
4	Printing of English Guide	16d	11/8/93	1/9/93	
5	Printing of French Guide	11d	23/8/93	7/9/93	
6	Printing of Envelopes	28d	20/7/93	27/8/93	
7	Distribution	5d	27/9/93	1/10/93	
8	2. SUPPORT MATERIAL	68d	19/7/93	25/10/93	
9	Drafting Inter.'s manual & ref. card (E)	28d	19/7/93	26/8/93	
10	Printing Inter.'s manual & ref. card (E)	20d	27/8/93	24/9/93	9
11	Drafting Inter.'s manual & ref. card (F)	33d	19/7/93	2/9/93	
12	Printing Inter.'s manual & ref. card (F)	15d	3/9/93	24/9/93	11
13	Drafting Drop-off Home study (E)	18d	3/8/93	26/8/93	
14	Printing Drop-off Home study (E)	20d	27/8/93	24/9/93	13
15	Drafting Drop-off Home study (F)	25d	3/8/93	7/9/93	
16	Printing Drop-off Home study (F)	13d	8/9/93	24/9/93	15
17	Drafting Drop-off Training Guide (E)	18d	3/8/93	26/8/93	
18	Printing Drop-off Training Guide (E)	20d	27/8/93	24/9/93	17
19	Drafting Drop-off Training Guide (F)	27d	3/8/93	9/9/93	
20	Pinting Drop-off Training Guide (F)	11d	10/9/93	24/9/93	19
21	Drafting Edit Home study (E)	22d	3/8/93	1/9/93	
22	Printing Edit Home study (E)	16d	2/9/93	24/9/93	21
23	Drafting Edit Home study (F)	28d	3/8/93	11/9/93	
24	Printing Edit Home study (F)	10d	13/9/93	24/9/93	23
25	Drafting Edit Training Guide (E)	24d	3/8/93	6/9/93	
26	Printing Edit Training Guide (E)	14d	7/9/93	24/9/93	25
27	Drafting Edit Training Guide (F)	30d	3/8/93	14/9/93	
28	Printing Edit Training Guide (F)	8d	15/9/93	24/9/93	27
29	Drafting Edit Workbook (E)	25d	3/8/93	7/9/93	
30	Printing Edit Workbook (E)	13d	8/9/93	24/9/93	29
31	Drafting Edit Workbook (F)	32d	3/8/93	16/9/93	
32	Printing Edit Workbook (F)	6d	17/9/93	24/9/93	31
33	Drafting Senior Inter.'s menuel (E)	23d	3/8/93	2/9/93	
34	Printing Senior Inter.'s manual (E)	15d	3/9/93	24/9/93	33
35	Drafting Senior Inter.'s manual (F)	27d	3/8/93	9/9/93	
36	Printing Senior Inter.'s manual (F)	11d	10/9/93	24/9/93	35
37	Drafting Sr. Int. Training guide (E)	27d	3/8/93	9/9/93	
38	Printing Sr. Int. Treining guide (E)	11d	10/9/93	24/9/93	37
39	Drafting Sr. Int. Treining guide (F)	32d	3/8/93	16/9/93	
40	Printing Sr. Int. Training guide (F)	6d	17/9/93	24/9/93	39
41	Drafting Regional office menual (E)	23d	3/8/93	2/9/93	
42	Printing Regional office manual (E)	15d	3/9/93	24/9/93	41
43	Drafting Regional office manual (F)	27d	3/8/93	9/9/93	
44	Printing Regional office manuel (F)	12d	10/9/93	27/9/93	43
45	Drafting CHL Operator's manual (E&F)	30d	3/8/93	14/9/93	
46	Printing CHL Operator's manuel (E&F)	28d	15/9/93	25/10/93	45
47	Drafting CHL Ref. manual (E&F)	41d	3/8/93	29/9/93	
48	Printing CHL Ref. manual (E&F)	17d	30/9/93	25/10/93	47
49	Drafting CHL Home study (E)	48d	3/8/93	11/10/93	
50	Printing CHL Home study (E)	10d	12/10/93	25/10/93	49
51	Drafting CHL Home study (F)	54d	3/8/93	19/10/93	
52	Printing CHL Home study (F)	4d	20/10/93	25/10/93	51
53	Drafting CHL Training Guide (E)	52d	3/8/93	15/10/93	
54	Printing CHL Treining Guide (E)	6d	18/10/93	25/10/93	53
55	Drafting CHLTraining Guide (F)	56d	3/8/93	21/10/93	
56	Printing CHL Treining Guide (F)	2d	22/10/93	25/10/93	55
57	CHL Forms	28d	15/9/93	25/10/93	
58	Shipping Sr. & Int. manuals to ROs	5d	27/9/93	1/10/93	
59	Shipping RO manual to ROs	2d	27/9/93	28/9/93	
60	3. FIELD PREPARATION	82d	15/7/93	10/11/93	
61	ROs allocate assignments	35d	15/7/93	2/9/93	
62	ROs transmit assignment file	2d	2/9/93	6/9/93	
63	Prepare Cluster-list file for ROs	17d	5/8/93	29/8/93	
64	ROs print cluster lists	9d	30/8/93	10/9/93	
65	Label & control list file prep.	29d	15/8/93	24/9/93	
66	Label & control list file to ROs	3d	27/9/93	29/9/93	
67	ROs print labels & control lists	3d	30/9/93	4/10/93	

ID	Name	Duration	Scheduled Start	Scheduled Finish	Predecessors
68	Training for Project Supervisors	2d	28/9/93	29/9/93	
69	Training for Senior Interviewers	5d	8/10/93	15/10/93	68
70	Training for Interviewers (Drop-off)	15d	8/10/93	29/10/93	
71	CHL Training	5d	25/10/93	29/10/93	
72	Training for Int. (Edit & Follow-up)	8d	1/11/93	10/11/93	
73	4. FIELD OPERATION	61d	1/11/93	28/1/94	
74	Questionneire Drop-off	5d	1/11/93	5/11/93	70
75	CHL Operations	9d	1/11/93	12/11/93	71
76	Cansus Tast Day	0d	8/11/93	8/11/93	
77	Mail-back	9d	8/11/93	19/11/93	
78	Questionnairas returned to interviewars	9d	10/11/93	23/11/93	
79	Edit & Follow-up	12d	10/11/93	26/11/93	
80	Int. return matarials to RO	4d	26/11/93	1/12/93	
81	Int. debriefing	10d	29/11/93	10/12/93	79
82	Quastionnaires shipped to HO	5d	24/1/94	28/1/94	90
83	5. DATA CAPTURE	125d	30/7/93	31/1/94	
84	Specifications	19d	30/7/93	26/8/93	
85	Programming	38d	9/8/93	30/9/93	
86	Tasting	10d	1/10/93	15/10/93	
87	Data Captura (ESS)	10d	9/11/93	23/11/93	
88	Data transmission (ESS)	5d	24/11/93	30/11/93	87
89	Unedited (raw) ESS data available	1d	3/12/93	3/12/93	
90	Data Capture (main survay)	28d	6/12/93	17/1/94	80
91	Control List Capture Devalop.	15d	10/8/93	30/8/93	
92	Control List Capture	7d	21/1/94	31/1/94	91
93	6. DATA PROCESSING	164d	2/8/93	28/3/94	
94	Analysis Plan - First draft	25d	2/8/93	7/9/93	
95	Analysis Plan - Final draft	10d	7/9/93	20/9/93	
96	Pre-edit specification davalopment	35d	20/8/93	8/10/93	
97	Pre-adit programming	77d	15/9/93	6/1/94	
98	Darivad variable spacifications	62d	2/8/93	29/10/93	
99	Darived variable programming	53d	15/9/93	30/11/93	
100	Data restructuring (ESS)	10d	6/12/93	17/12/93	89
101	Raw Data transmission (main survey)	29d	7/12/93	19/1/94	
102	Unedited (raw) main survey data available	1d	21/1/94	21/1/94	101
103	Taxt racords created	4d	24/1/94	27/1/94	101
104	Data restructuring (main survey)	4d	24/1/94	27/1/94	101
105	Auto-coding	29d	28/1/94	9/3/94	103
106	Aga-sex imputation for weighting	10d	15/2/94	28/2/94	82
107	Main-survey weighting	14d	1/3/94	18/3/94	106
108	File cleaning - ESS	3d	2/2/94	4/2/94	100,92
109	Linkage:ESS & mein survey	5d	7/2/94	11/2/94	108
110	Primary DVs, production	21d	30/1/94	28/2/94	
111	Text codas linked	8d	10/3/94	21/3/94	105
112	Secondary DVs, production	6d	21/3/94	28/3/94	
113	Raw control-sheet data available	1d	1/2/94	1/2/94	92
114	Data restructuring (control sheet)	4d	1/2/94	4/2/94	113
115	Control-sheet and main-survey linkage	4d	4/2/94	9/2/94	114
116	7. ANALYSIS	148d	1/2/94	31/8/94	
117	Processed Data aveilable	0d	1/4/94	1/4/94	107
118	Analysis of Data	84d	1/2/94	31/5/94	
119	Intarnal report	22d	1/6/94	30/6/94	
120	Internal presentation	1d	6/6/94	6/6/94	
121	Final report	42d	4/7/94	31/8/94	